

New Records of Plant Species from Singapore

ALI IBRAHIM, P.T. CHEW, HJ SIDEK KIAH AND JOSEPH T.K. LAI

Singapore Botanic Gardens,
Cluny Road,
Singapore 259569

Abstract

Most notable among the 28 new records of flowering plant species from Singapore are the first record of *Mukia maderaspatana* (Cucurbitaceae) for both Singapore and Peninsular Malaysia, the first record for several genera - *Chonemorpha*, *Ichnocarpus* and *Kibatalia* (Apocynaceae), *Gymnanthera* (Asclepiadaceae) and *Scaphochlamys* (Zingiberaceae) and the two dipterocarps, *Dipterocarpus elongatus* and *Shorea ochrophloia*.

Introduction

In 1994, Turner reported the flora of the vascular plants of Singapore to number 2277 species in 868 genera and 158 families. New records (those not listed by Turner, 1993) continue to be added and 18 of these are already published (Turner *et al.* 1994, 1997).

Here we list a further 28 species. Of these, a few are previously overlooked species, such as *Hedyotis verticillata*, *Ichnocarpus serpyllifolius*, *Piper macropiper* and *Xanthophyllum amoenum* that were in fact collected many years ago. Many were recorded when plots were set up in the Central Catchment Nature Reserve (which includes the MacRitchie area and the Nee Soon Freshwater Swamp) as part of a survey commissioned by the National Parks Board, which was carried out in 1992 and 1993 (Wong *et al.*, 1994). However, even a forest as well known as the Bukit Timah Nature Reserve continues to turn up new records. Perhaps more surprising is that some of these are large canopy trees, such as *Shorea ochrophloia*, that are visible from commonly walked trails (Lum and Sharp, 1996).

All specimens cited here are lodged at SING.

New Records

Apocynaceae *Alstonia macrophylla* Wall. ex G. Don

Singapore (without locality) *N. Cantley* s.n. — 1880s; Pulau Sentosa *Heaslett* s.n. — 29 Jan 1973, Mount Faber *Sao Kyi Win* 24/AmI — 16 June 1983.

Also observed in Pierce Reservoir area, Central Catchment Nature Reserve.
Distribution: Indo-China and Thailand south to Sulawesi.

Apocynaceae *Alstonia pneumatophora* Back. ex L.G. den Berger
MacRitchie area, Central Catchment Nature Reserve Wong, Ali & Chew
15 — Aug 1994.

Also observed from Nee Soon Stream near Lorong Banir and a fine tree
with a 3.4 m girth grows in the Zoological Garden, Mandai.

Distribution: Sumatra, Peninsular Malaysia, Singapore, Riouw, Borneo
and Sulawesi.

Apocynaceae *Chonemorpha fragrans* (Moon) Alston
Nee Soon Firing Ranges, Central Catchment Nature Reserve. Joseph Lai
& Ali Ibrahim LJ 102 — 5 Nov 1996.

Distribution: India, Sri Lanka, Myanmar, Peninsular Malaysia, Singapore
and Java.

Apocynaceae *Ichnocarpus serpyllifolius* (Blume) P.I. Forster

This common, but overlooked, species was first identified by David
Middleton and Ali Ibrahim. This enabled a specimen, unnumbered and
undated (although the label indicated that it had been collected in the
1920s) that had long lain in the herbarium unidentified even to its family
(*accession number 082726*) to be identified. The collector is recorded as
Barnay Batto and the notes on the label read: "The leaf is used for those
who got smallpox is make into powder and with little safron is mixed with
run over the body."

Recent collections include:

Bukit Timah Nature Reserve Ali Ibrahim AI 212 — 14 September 1994;
Nura A. Karim et al. NK 255 — 14 December 1995.

Distribution: Peninsular Thailand, Sumatra, Java, Peninsular Malaysia,
Singapore, Borneo, the Philippines and Sulawesi.

Apocynaceae *Kibatalia maingayi* (Hook. f.) Woodson

Nee Soon, Central Catchment Nature Reserve Wong, Ali & Chew 1 — 29
Oct 1992.

Also observed from Upper Seletar Reservoir Park and Nee Soon Firing
Ranges.

Distribution: Sumatra, Peninsular Malaysia, Singapore, Banka and Borneo.

Apocynaceae *Urceola elastica* Roxb.

Bukit Timah Nature Reserve E. Tang & Hj. Sidek Kiah 996 — 12 Oct
1995.

Distribution: Sumatra, Peninsular Malaysia and Singapore.

Asclepiadaceae *Gymnanthera oblonga* (Burm. f.) P.S. Green

Jurong, Science Centre *Jennifer Ng s.n.* - 1 April 1983; Changi Point mangrove *Ali Ibrahim AI 139* — Sept 1991; Changi (Loyang Avenue Swamp) *Joseph Lai & Samsuri LJ 282* — 25 Nov 1997.

Distribution: Thailand, Singapore, Java, the Philippines and south to northern Australia. The characteristic habitat of this species is the landward side of mangroves. The fact that it is not yet recorded from Peninsular Malaysia suggests that it has probably been overlooked rather than representing a gap in its geographic distribution.

Burseraceae *Dacryodes rugosa* (Blume) H.J. Lam

Bukit Timah Nature Reserve *Mohd Shah & Samsuri MS 3893* — 5 July 1976.

Distribution: S. Sumatra, Peninsular Malaysia, Singapore, W. Java and Borneo.

Cucurbitaceae *Gymnopetalum integrifolium* (Roxb.) Kurz

Singapore Quarry, Bukit Timah. *Ali Ibrahim & S.C. Chin AI 241* — 2 Sept 1994.

Distribution: W. India to Indo-China and south to Java.

Cucurbitaceae *Mukia maderaspatana* (L.) M.J. Roem.

Khatib Bongsu (secondary vegetation) *E. Tang & Hj. Sidek Kiah 1306* — 23 Feb 1998.

There is a single specimen from Malaysia, *J.G. Reed s.n.* — 7 April 1941, from Bagan Datoh, Perak. Apparently it is an incidental introduction from southern India as Reed records its name in Tamil as *Masu masukai*.

Distribution: India south to Australia.

Dipterocarpaceae *Dipterocarpus elongatus* Korth.

McRitchie Reservoir, Central Catchment Nature Reserve *J. Sinclair SFN 40673* – 14 July 1955, *T.C. Whitmore 66* – 14 Feb 1957; Mandai, Central Catchment Nature Reserve. *Wong, Ali & Chew 2* — 16 Nov 1992.

Distribution: E. Sumatra, E. Peninsular Malaysia, Singapore and Borneo.

Dipterocarpaceae *Shorea ochrophloia* Strugnell ex Symington

Mandai, Central Catchment Nature Reserve. *Ali Ibrahim et al. AI 24* — 7 July 1994.

Also observed from the MacRitchie area and Bukit Timah Nature Reserve.

Distribution: W. Sumatra, Peninsular Malaysia and Singapore.

Euphorbiaceae *Aporosa miqueliana* Mull.Arg.

Upper Pierce area, Central Catchment Nature Reserve. *Wong, Ali & Chew 4* — 14 Oct 1992.

Distribution: Sumatra, Peninsular Malaysia and Singapore.

Euphorbiaceae *Baccaurea brevipes* Hook. f.

Bukit Timah Nature Reserve. *E. Tang & Hj. Sidek* 1040 — 9 Nov 1995, 1292 — 23 May 1996.

Distribution: Peninsular Malaysia, Singapore and Borneo.

Euphorbiaceae *Trigonostemon villosus* Hook. f.

Mandai, next to Mandai Columbarium. *Joseph Lai & Ali Ibrahim* LJ 22 — 11 Dec 1995; Mandai, Central Catchment Nature Reserve. *Joseph Lai & Ali Ibrahim* LJ 80 — 15 Oct 1996.

Distribution: Peninsular Malaysia (south from Perak and Trengganu) and Singapore.

Guttiferae *Garcinia maingayi* Hook. f. var. *stylosa* King

Both the species and variety are new records for Singapore.

Seletar, Central Catchment Nature Reserve. *Wong, Ali & Chew* 6 — 21 Dec 1992.

Distribution: This variety is confined to Peninsular Malaysia (Perak and Johore) and Singapore.

Leguminosae *Intsia palembanica* Miq.

In Singapore, this species is represented by a majestic individual on the summit of Bukit Timah Hill, identified by Ali Ibrahim.

Distribution: Thailand to W. New Guinea.

Meliaceae *Aglaia leucophylla* King

Mandai, Central Catchment Nature Reserve. *Wong, Ali & Chew* 9 — 23 Nov 1992.

Distribution: Sumatra, Peninsular Malaysia, Singapore, Borneo and the Philippines.

Meliaceae *Aglaia malaccensis* (Ridl.) Pannell

Bukit Timah Nature Reserve *Liew SFN* 37278 — 4 July 1941; MacRitchie area, Central Catchment Nature Reserve. *Wong, Ali & Chew* 17 — Oct 1992; Bukit Kallang, Central Catchment Nature Reserve. *Joseph Lai & Ali Ibrahim* LJ 94 — 29 Oct 1996.

Distribution: Peninsular Malaysia, Singapore and Borneo.

Meliaceae *Chisocheton sarawakanus* (C. DC.) Harms

Mandai, Central Catchment Nature Reserve. *Wong, Ali & Chew* 10 — 23 Nov 1992.

Distribution: Peninsular Malaysia, Singapore, Banka and Borneo.

Pandaceae *Galearia maingayi* Hook. f.

Botanic Gardens Jungle *E.J.H. Corner SFN* 32519 — 16 Nov 1936; Bukit Timah Nature Reserve *E.J.H. Corner SFN* 33588 — 6 July 1937, *SFN*

36410 – 25 April 1939.

Distribution: Sumatra, Peninsular Malaysia, Singapore and Borneo.

Piperaceae *Piper macropiper* Pennant

Bukit Mandai *Nangchi s.n.* — 19 April 1887; Krangi Forest Reserve *J.S. Goodenough s.n.* — 8 April 1890; Tuas *J.S. Goodenough 4684* — 29 May 1890; Chan Chu Kang *H.N. Ridley 6153* — 1894, *s.n.* — Feb 1896; Bukit Timah Nature Reserve *Chew W.L. 1442* — 30 May 1967; Nee Soon Firing Ranges, Central Catchment Nature Reserve *Joseph Lai LJ 99* — 5 Nov 1996.

Distribution: India and Sri Lanka, south to New Guinea and the Solomon Islands.

Polygalaceae *Xanthophyllum amoenum* Chodat

Bukit Timah Nature Reserve *E.J.H. Corner s.n.* — Nov 1943; McRitchie area, Central Catchment Nature Reserve. *Wong, Ali & Chew 12* — 17 Sept 1992.

Distribution: Peninsular Malaysia, Singapore, Riouw and Borneo.

Rubiaceae *Geophila repens* (L.) I.M. Johnst. var. *asiatica* (Cham. & Schltdl.) Fosberg

Fort Canning Park *Ali Ibrahim & Saifuddin AI 279* — 17 March 1998.

This species is quite widespread in Singapore and populations are known from Fort Canning Park, Makeway Avenue, Mount Emily Park and Pearl's Hill City Park.

Distribution: Indo-Malaya and China, south to Peninsular Malaysia, Singapore and Java.

Rubiaceae *Hedyotis verticillata* (L.) Lam

Chua Chu Kang *Ridley s.n.* — Feb 1894; Sultan of Johore's Land, Tanglin *Joseph Lai LJ 114* — 12 Dec 1996.

Distribution: India to Java.

Sapindaceae *Lepisanthes senegalensis* (Poir.) Leenh.

Mandai Road, Track 7 *Joseph Lai LJ 181* — 11 Feb 1997.

Also observed from MacRitchie area, Central Catchment Nature Reserve.

Distribution: Africa to New Guinea.

Sterculiaceae *Pterospermum lancifolium* Roxb.

Singapore (locality and collector unknown) *Accession No. 075943, 075944* — 1880s; Fort Canning Road *Ridley s.n.* — 1902, *Joseph Lai LJ 180* — 10 Jan 1997.

Distribution: India (NW Himalayas), Myanmar, Thailand and Peninsular Malaysia. Singapore appears to be the southernmost locality for this species.

Zingiberaceae *Scaphochlamys tenuis* Holttum

Bukit Timah Nature Reserve *H. Kennedy & E.P. Tay 4462A* — 16 Aug 1983.

Distribution: Peninsular Malaysia (previously known only from the type collection from Trengganu) and Singapore.

This is the first record of the genus *Scaphochlamys* from Singapore and was identified by Kai Larsen. Another plant with the same number (*4462B*) was tentatively identified by Kai Larsen as *Scaphochlamys* aff. *breviscape* Holttum but this has yet to be confirmed.

Acknowledgement

We are grateful to Ruth Kiew for help in writing this paper.

References

- Lum, S. and I. Sharp (eds). 1996. *A View from the Summit. The Story of Bukit Timah Nature Reserve*. Nanyang Technical University Singapore, National University Singapore and National Parks Board Singapore.
- Turner, I.M. 1993. The names used for Singapore plants since 1900. *Gardens' Bulletin Singapore*. **45**: 1–287.
- Turner, I. M. 1994. The taxonomy and ecology of the vascular plant flora of Singapore: a statistical analysis. *Botanical Journal Linnean Society*. **114**: 215–227.
- Turner, I.M., H.T.W. Tan and K.S. Chua. 1994. Additions to the flora of Singapore, II. *Gardens' Bulletin Singapore*. **42**: 131–135.
- Turner, I.M., H.T.W. Tan, E.E.L. Seah, A.H.B. Loo and Ali Ibrahim. 1997. Additions to the Flora of Singapore, III. *Gardens' Bulletin Singapore*. **49**: 1–5.
- Wong, Y.K., P.T. Chew and Ali Ibrahim. 1994. The tree communities of the Central Catchment Nature Reserve, Singapore. *Gardens' Bulletin Singapore*. **46**: 37–78.